

## **WAVEFRONT CALIBRATION ANALYZER AND METHODS**

### **ABSTRACT OF THE DISCLOSURE**

A wavefront sensor enhances calibration of a laser ablation system, such as a laser eye surgery system, by measuring one or more characteristics of an ablated test surface. Typically, light is passed through the ablated test surface, and the light is analyzed to determine the test surface characteristics. In some embodiments, the ablated test surface is positioned along a treatment plane. In some embodiments, light is passed through a wavefront sensor, such as a Hartmann-Shack sensor, to convert the light into electrical signals. A processor then converts the electrical signals into data, such as surface maps showing high-order aberrations and/or artifacts on the test surface, refractive power measurements, shape measurements, and the like. Generated data may then be used to calibrate a laser surgery system.